

In the Senate of the United States,

November 19, 1999.

Resolved, That the bill from the House of Representatives (H.R. 1753) entitled “An Act to promote the research, identification, assessment, exploration, and development of gas hydrate resources, and for other purposes.”, do pass with the following

AMENDMENTS:

Strike out all after the enacting clause and insert:

1 ***SECTION 1. SHORT TITLE.***

2 *This Act may be cited as the “Methane Hydrate Re-*
3 *search and Development Act of 1999”.*

4 ***SEC. 2. DEFINITIONS.***

5 *In this Act:*

6 (1) *CONTRACT.*—*The term “contract” means a*
7 *procurement contract within the meaning of section*
8 *6303 of title 31, United States Code.*

9 (2) *COOPERATIVE AGREEMENT.*—*The term “co-*
10 *operative agreement” means a cooperative agreement*

1 *within the meaning of section 6305 of title 31, United*
2 *States Code.*

3 (3) *DIRECTOR.*—*The term “Director” means the*
4 *Director of the National Science Foundation.*

5 (4) *GRANT.*—*The term “grant” means a grant*
6 *awarded under a grant agreement, within the mean-*
7 *ing of section 6304 of title 31, United States Code.*

8 (5) *INDUSTRIAL ENTERPRISE.*—*The term “in-*
9 *dustrial enterprise” means a private, nongovern-*
10 *mental enterprise incorporated under Federal or*
11 *State law that has an expertise or capability that re-*
12 *lates to methane hydrate research and development.*

13 (6) *INSTITUTION OF HIGHER EDUCATION.*—*The*
14 *term “institution of higher education” means an in-*
15 *stitution of higher education, within the meaning of*
16 *section 102(a)(1) of the Higher Education Act of 1965*
17 *(20 U.S.C. 1002(a)(1)).*

18 (7) *METHANE HYDRATE.*—*The term “methane*
19 *hydrate” means—*

20 (A) *a methane clathrate that is in the form*
21 *of a methane-water ice-like crystalline material*
22 *and is stable and occurs naturally in deep-ocean*
23 *and permafrost areas, and*

1 (B) other natural gas hydrates found in as-
 2 sociation with deep-ocean and permafrost depos-
 3 its of methane hydrate.

4 (8) SECRETARY OF ENERGY.—The term “Sec-
 5 retary of Energy” means the Secretary of Energy,
 6 acting through the Assistant Secretary for Fossil En-
 7 ergy.

8 (9) SECRETARY OF COMMERCE.—The term “Sec-
 9 retary of Commerce” means the Secretary of Com-
 10 merce, acting through the Administrator of the Na-
 11 tional Oceanic and Atmospheric Administration.

12 (10) SECRETARY OF DEFENSE.—The term “Sec-
 13 retary of Defense” means the Secretary of Defense,
 14 acting through the Secretary of the Navy.

15 (11) SECRETARY OF THE INTERIOR.—The term
 16 “Secretary of the Interior” means the Secretary of the
 17 Interior, acting through the Director of the United
 18 States Geological Survey and the Director of the Min-
 19 erals Management Service.

20 **SEC. 3. METHANE HYDRATE RESEARCH AND DEVELOPMENT**
 21 **PROGRAM.**

22 (a) IN GENERAL.—

23 (1) COMMENCEMENT OF PROGRAM.—Not later
 24 than 180 days after the date of enactment of this Act,
 25 the Secretary of Energy, in collaboration with the

1 *Secretary of Commerce, the Secretary of Defense, the*
2 *Secretary of the Interior, and the Director, shall com-*
3 *mence a program of methane hydrate research and*
4 *development in accordance with subsection (b).*

5 (2) *DESIGNATIONS.—The Secretary of Energy,*
6 *the Secretary of Commerce, the Secretary of Defense,*
7 *the Secretary of the Interior, and the Director shall*
8 *designate individuals to carry out this section.*

9 (3) *COORDINATION.—The individual designated*
10 *by the Secretary of Energy shall coordinate all activi-*
11 *ties within the Department of Energy relating to*
12 *methane hydrate research and development.*

13 (4) *MEETINGS.—The individuals designated*
14 *under paragraph (2) shall meet not later than 270*
15 *days after the date of enactment of this Act, and not*
16 *less frequently than every 120 days thereafter to—*

17 (A) *review the progress of the program*
18 *under paragraph (1); and*

19 (B) *make recommendations on future ac-*
20 *tivities to occur subsequent to the meeting.*

21 (b) *GRANTS, CONTRACTS, AND COOPERATIVE AGREE-*
22 *MENTS.—*

23 (1) *ASSISTANCE AND COORDINATION.—In car-*
24 *rying out the program of methane hydrate research*
25 *and development authorized by this subsection the*

1 *Secretary of Energy may award grants or contracts*
2 *to, or enter into cooperative agreements with, institu-*
3 *tions of higher education and industrial enterprises*
4 *to—*

5 *(A) conduct basic and applied research to*
6 *identify, explore, assess, and develop methane hy-*
7 *drate as a source of energy;*

8 *(B) assist in developing technologies re-*
9 *quired for efficient and environmentally sound*
10 *development of methane hydrate resources;*

11 *(C) undertake research programs to provide*
12 *safe means of transport and storage of methane*
13 *produced from gas methane hydrates;*

14 *(D) promote education and training in*
15 *methane hydrate resource research and resource*
16 *development;*

17 *(E) conduct basic and applied research to*
18 *assess and mitigate the environmental impacts of*
19 *hydrate degassing (including both natural*
20 *degassing and degassing associated with commer-*
21 *cial development);*

22 *(F) develop technologies to reduce the risks*
23 *of drilling through methane hydrates; and*

24 *(G) conduct exploratory drilling in support*
25 *of the activities authorized by this paragraph.*

(2) *COMPETITIVE MERIT-BASED REVIEW.*—*Funds made available under paragraph (1) shall be made available based on a competitive merit-based process.*

(3) *CONSULTATION.*—

(A) *IN GENERAL.*—*The Secretary of Energy shall establish an advisory panel consisting of experts from industry, institutions of higher education, and Federal agencies to—*

(i) advise the Secretary of Energy on potential applications of methane hydrate;

(ii) assist in developing recommendations and priorities for the methane hydrate research and development program carried out under subsection (a)(1); and

(iii) not later than 2 years after the date of enactment of this Act, and at such later dates as the panel considers advisable, submit to Congress a report on the anticipated impact on global climate change from—

(I) methane hydrate formation;

(II) methane hydrate degassing (including natural degassing and degassing associated with commercial development); and

1 (III) *the consumption of natural*
2 *gas produced from methane hydrates.*

3 (B) *MEMBERSHIP.*—*Not more than twenty-*
4 *five percent of the individuals serving on the ad-*
5 *visory panel shall be Federal employees.*

6 (c) *LIMITATIONS.*—

7 (1) *ADMINISTRATIVE EXPENSES.*—*Not more than*
8 *5 percent of the amount made available to carry out*
9 *this section for a fiscal year may be used by the Sec-*
10 *retary of Energy for expenses associated with the ad-*
11 *ministration of the program carried out under sub-*
12 *section (a)(1).*

13 (2) *CONSTRUCTION COSTS.*—*None of the funds*
14 *made available to carry out this section may be used*
15 *for the construction of a new building or the acquisi-*
16 *tion, expansion, remodeling, or alteration of an exist-*
17 *ing building (including site grading and improve-*
18 *ment and architect fees).*

19 (d) *RESPONSIBILITIES OF THE SECRETARY OF EN-*
20 *ERGY.*—*In carrying out subsection (b)(1), the Secretary of*
21 *Energy shall—*

22 (1) *facilitate and develop partnerships among*
23 *government, industry, and institutions of higher edu-*
24 *cation to research, identify, assess, and explore meth-*
25 *ane hydrate resources;*

1 (2) undertake programs to develop basic infor-
 2 mation necessary for promoting long-term interest in
 3 methane hydrate resources as an energy source;

4 (3) ensure that the data and information devel-
 5 oped through the program are accessible and widely
 6 disseminated as needed and appropriate;

7 (4) promote cooperation among agencies that are
 8 developing technologies that may hold promise for
 9 methane hydrate resource development; and

10 (5) report annually to Congress on accomplish-
 11 ments under this section.

12 **SEC. 4. AMENDMENTS TO THE MINING AND MINERALS POL-**
 13 **ICY ACT OF 1970.**

14 Section 201 of the Mining and Minerals Policy Act
 15 of 1970 (30 U.S.C. 1901) is amended—

16 (1) in paragraph (6)—

17 (A) in subparagraph (F), by striking “and”
 18 at the end;

19 (B) by redesignating subparagraph (G) as
 20 subparagraph (H); and

21 (C) by inserting after subparagraph (F) the
 22 following:

23 “(G) for purposes of this section and sec-
 24 tions 202 through 205 only, methane hydrate;
 25 and”.

1 (2) *by redesignating paragraph (7) as para-*
 2 *graph (8); and*

3 (3) *by inserting after paragraph 6 the following:*

4 “(7) the term “methane hydrate” means—

5 “(A) *a methane clathrate that is in the form*
 6 *of a methane-water ice-like crystalline material*
 7 *and is stable and occurs naturally in deep-ocean*
 8 *and permafrost areas; and*

9 “(B) *other natural gas hydrates found in*
 10 *association with deep-ocean and permafrost de-*
 11 *posits of methane hydrate.”.*

12 **SEC. 5. REPORTS AND STUDIES.**

13 *The Secretary of Energy shall simultaneously provide*
 14 *to the Committee on Science and the Committee on Re-*
 15 *sources of the House of Representatives and the Committee*
 16 *on Energy and Natural Resources of the Senate copies of*
 17 *any report or study that the Department of Energy pre-*
 18 *pares pursuant to this Act.*

19 **SEC. 6. AUTHORIZATION OF APPROPRIATIONS.**

20 *There are authorized to be appropriated to the Sec-*
 21 *retary of Energy to carry out this Act—*

22 (1) *\$5,000,000 for fiscal year 2000;*

23 (2) *\$7,500,000 for fiscal year 2001;*

24 (3) *\$11,000,000 for fiscal year 2002;*

25 (4) *\$12,000,000 for fiscal year 2003;*

- 1 (5) \$12,000,000 for fiscal year 2004; and
2 (6) thereafter such sums as are necessary.
3 *Amounts authorized under this section shall remain avail-*
4 *able until expended.*

Amend the title so as to read: “An Act to promote the research, identification, assessment, exploration, and development of methane hydrate resources, and for other purposes.”.

Attest:

Secretary.

106TH CONGRESS
1ST SESSION

H. R. 1753

AMENDMENTS